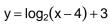
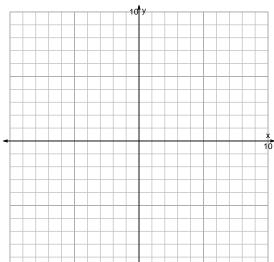
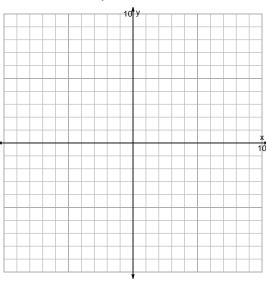
s<br/>18<br/>quiz: EXP LOG (QUIZ v244)  $\,$ 

1. Graph  $y = \log_2(x-4) + 3$  and  $y = 2^{x+6} + 3$  on the grids below. Also, draw any asymptotes with dotted lines.





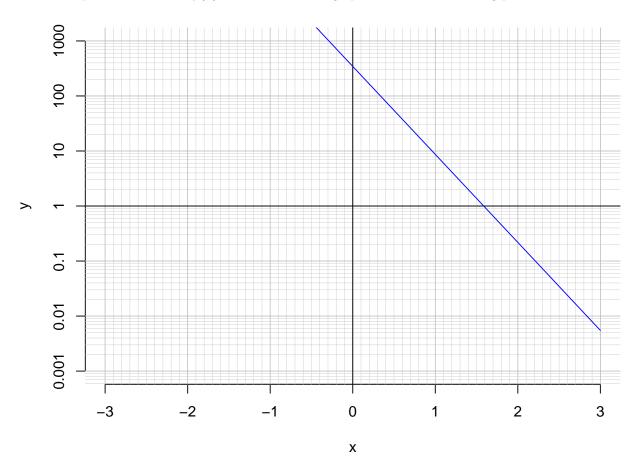
$$y = 2^{x+6} + 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-4}{7}\right) \cdot 2^{-3t/5}$$

3. An exponential function  $f(x) = 345 \cdot e^{-3.68x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(1.1).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.05)$ .